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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/713,108

11/15/2000

Kartik N. Raghavan

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23460 7590 04/27/2004

LEYDIG VOIT & MAYER, LTD  
TWO PRUDENTIAL PLAZA, SUITE 4900  
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CHICAGO, IL 60601-6780

EXAMINER

CAO, CHUN

ART UNIT

PAPER NUMBER

2115

DATE MAILED: 04/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/713,108		RAGHAVAN ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Chun Cao		2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 17-27, 29-42 and 45-62 is/are rejected.
- 7) ☒ Claim(s) 14-16, 28, 43 and 44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-62 are presented for examination.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title is imprecise.

#### ***Continued Examination Under 37 CFR 1.114***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 12/3/2003 has been entered.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-7, 17-19, 29-30, 33, 35-38 and 53-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis (Kikinis), US patent no. 5,708,776 in view of Ice, Jr. et al. (Ice), US patent no. 6,658, 563.

Kikinis is a prior art reference cited by applicant in IDS paper no. 4.

As per claim 1, Kikinis teaches a method for a computer system to boot itself to a known state in the event of a failure, the computer system having a physical storage device at least a first partition and a second partition, each of the first and second partitions storing a redundant copy of a system image [fig. 2; col. 1, lines 48-63; col. 3, lines 8-16], the method comprising:

determining whether or not the computer can complete the boot process using the system image on the first partition [col. 3, lines 20-26];

determining whether or not the computer system can complete the boot process using the system image on the second partition if it is determined the boot process cannot be completed using the system image on the first partition [col. 1, lines 48-63; col. 3, lines 26-32]; and

completing the boot process of the computer system using the system image on the second partition if it is determined that boot process can be completed from the second partition [col. 1, lines 48-63; col. 3, lines 26-32].

Kikinis does not explicitly teach of initiating a system boot process from a source other than the physical storage device.

Ice teaches of initiating a system boot process from a source [floppy drive or CD ROM] other than the physical storage device [col. 2, lines 17-35].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Kikinis and Ice because they both teach of booting a computer system, and the specify teachings of Ice stated above would provide more

flexibility for Kikinis system by allowing the computer system initializes boot process from different source.

As per claim 3, Kikinis teaches of completing the boot process of the computer system using the system image on the first partition [col. 2, lines 8-10; col. 3, lines 16-26].

As to claims 4-7 and 35-38, Ice teaches of initiating a system boot process is implement from an optical disk in an optical drive, and the optical disk is a self bootable CD-ROM [col. 2, lines 17-19].

As to claims 17-19 and 53-55, Kikinis and Ice together teach the claimed method of steps. Therefore, Kikinis and Ice together teach claimed system to carry out the method of steps.

As to claims 29-30, Kikinis and Ice together teach the claimed method of steps. Therefore, Kikinis and Ice together teach claimed computer readable medium to carry out the method of steps.

As per claim 33 is written means plus function and contain the same limitations as claim 1, therefore, the same rejection is applied.

6. Claims 2, 20-22, 31-32, 34 and 56-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis (Kikinis), US patent no. 5,708,776 in view of Ice, Jr. et al. (Ice), US patent no. 6,658, 563 and Meyer et al. (Meyer), US patent no. 6,170,055.

As to claims 2, 20, 31-32 and 34, 56, Kikinis and Ice do not teach of restoring the system image on each of the first and second partition if it is determined that boot

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process cannot be completed using the system image stored on the either the first partition or on the second partition. In other word, they do not teach of restoring the system image on a physical drive if that process cannot be completed using the system image stored on the physical drive.

Meyer teaches of restoring the system image on a physical drive if that process cannot be completed using the system image stored on the physical drive [col. 4, lines 9-14; col. 13, lines 19-27].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Kikinis and Ice and Meyer because they teach of booting a computer system, and the specify teachings of Meyer stated above would increase the reliability of Kikinis system by allowing the computer system to restore the system image if it failed to complete boot process.

As to claims 21 and 57, Meyer discloses the program module for performing at least one of the logical steps comprising the boot process, and the program module for restoring the system image on at least of the partitions are stored on the second computer readable storage device [col. 4, lines 9-14; col. 13, lines 19-27].

As to claims 22 and 58, Ice discloses that at least one readable storage devices is a hard dist and the second computer readable device is a CD-ROM [col. 2, lines 17-19].

7. Claims 8-13 and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis (Kikinis), US patent no. 5,708,776 in view of Ice, Jr. et al.

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(Ice), US patent no. 6,658, 563 and Bealkowski et al. (Bealkowski), US patent no. 5,410,699.

As per claims 8, 11, 39 and 41, Kikinis and Ice do not teach of verifying the integrity of a Master Boot Record and the first partition and the second partition.

Bealkowski teaches of verifying the integrity of a Master Boot Record and the first partition [col. 3, lines 46-52].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Kikinis and Ice and Bealkowski, the specify teachings of Bealkowski stated above would increase the reliability of Kikinis system by allowing the computer system to verifying the MBR of the system image.

As to claims 9 and 40, inherently, Kikinis teaches of determining whether or not the computer system can complete the boot process using the system image on the first partition is further comprised of obtaining the result of a previous attempt to complete the boot process using the system image on the first partition [col. 1, lines 48-63; col. 3, lines 26-32].

As per claim 10, Kikinis teaches of determining whether or not the computer system can complete the boot process using the system image on the first partition is further comprised of attempting to complete the boot process using the system image on the first partition [col. 1, lines 48-63; col. 3, lines 26-32].

As to claims 12 and 42, inherently, Kikinis teaches of determining whether or not the computer system can complete the boot process using the system image on the second partition is further comprised of obtaining the result of a previous attempt to

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complete the boot process using the system image on the second partition [col. 1, lines 48-63; col. 3, lines 26-32].

As per claim 13, Kikinis teaches of determining whether or not the computer system can complete the boot process using the system image on the second partition is further comprised of attempting to complete the boot process using the system image on the first partition [col. 1, lines 48-63; col. 3, lines 26-32].

8. Claims 23-27 and 45-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis (Kikinis), US patent no. 5,708,776 in view of Ice, Jr. et al. (Ice), US patent no. 6,658, 563 and Meyer et al. (Meyer), US patent no. 6,170,055 and Bealkowski et al. (Bealkowski), US patent no. 5,410,699.

As to claims 23 and 45-46 basically contain the same limitations and carries out by the corresponding steps in claims 1, 2 and 8 and performing the same operation. Kikinis, Ice, Meyer and Bealkowski together teach the limitations as claims 1, 2 and 8. Accordingly, claims 23 and 45 are rejected for the same reason as set forth for claims 1, 2 and 8. It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Kikinis and Ice and Meyer and Bealkowski, the specify teachings of Ice, Meyer and Bealkowski stated above would increase the reliability of Kikinis system by allowing the computer system to restoring a system image and verifying the MBR of the system image.

As to claims 24-25 and 47-49, Ice teaches that the boot source is a self bootable CD-ROM [col. 2, lines 17-19].



Claims 26 and 51 contain the same limitation as claim 9, therefore the same rejection is applied.

Claim 27 contains the same limitation as claim 12, therefore the same rejection is applied.

As per claim 50, Bealkowski teaches of verifying the integrity of a Master Boot Record and the first partition [col. 3, lines 46-52].

9. Claims 59-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis (Kikinis), US patent no. 5,708,776 in view of Ice, Jr. et al. (Ice), US patent no. 6,658, 563 and Miller (Miller), US patent no. 6,308,265.

As per claim 59, Kikinis teaches a method for ensuring that a computing device can boot to known state in the event that an error occurs, the computing device having a physical storage device with at least a first partition and a second partition, each of the first and second partitions containing a redundant copy of the system image [fig. 2; col. 1, lines 48-63; col. 3, lines 8-16], the method comprising:

determining whether or not the computer system can complete the boot process using the system image on the second partition if it is determined the boot process cannot be completed using the system image on the first partition [col. 1, lines 48-63; col. 3, lines 26-32]; and

completing the boot process of the computer system using the system image on the second partition if it is determined that boot process can be completed from the second partition [col. 1, lines 48-63; col. 3, lines 26-32].

Kikinis does not explicitly teach of initiating a system boot process from a source other than the physical storage device; and modifying the system image on the first partition.

Ice teaches of initiating a system boot process from a source [floppy drive or CD ROM] other than the physical storage device [col. 2, lines 17-35].

Miller teaches a method for modifying the system image on the first partition such that the system image on the second partition is no longer redundant to the system image on the first partition, and determining whether or not the computer system can complete the boot process using the modified system image on the first partition [col. 2, 34-57]

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Kikinis and Ice and Miller because they teach of booting a computer system, and the specify teachings of Ice stated above would increase the reliability of Kikinis system by allowing the computer system boots from the second partition.

As per claim 60, Miller teaches of modifying the system image on the first partition is comprised of adding a service pack to the system image [col. 3, lines 42-44; col. 6, lines 27-33].

As to claims 61-62, inherently, Miller teaches of modifying the system image to a later version of the system image and custom configuring the system image [col. 3, lines 42-44; col. 4, lines 40-44].

***Allowable Subject Matter***

10. Claims 14-16, 28, 43-44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kwan et al., US patent no. 6,158,002, teaches a method for initiating a system boot from floppy drive other than a hard disk [col. 8, lines 26-32; fig. 2B].

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao at (703) 308-6106. The examiner can normally be reached on Monday-Friday from 7:30 am - 4:00 pm. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor Thomas Lee can be reached at (703) 305-9717. The fax number for this Art Unit is following: Official (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 306-5631.

A handwritten signature in black ink, appearing to read 'Chun Cao', with a stylized, cursive script.

Chun Cao

Apr. 20, 2004